apparatus. Accordingly, because no viewing camera is defined in the instructions, the third-party apparatus generates the first image of the 3D computer model in accordance with the default viewing camera.

Similarly, at step S9-6 in Figure 9, the image data is generated in accordance with the default viewing camera.

Consequently, the user can determine the content of the image generated by the default camera each time the 3D computer model of the subject object is accessed by orientating the subject 210 on the photographic mat relative to the front marker 170.

As an alternative to the processing described above, rather than defining the y coordinate of each calibration pattern in dependence upon the expected height of the subject object (that is, the y coordinate of the plane in which each calibration pattern lies is defined to be -1.0 of the processing above), the 3D computer model of the subject object may be generated relative to a calibration pattern lying in a plane having a predetermined y coordinate of, say, 0.0 (so that the centre of the calibration pattern is at a coordinate position of (0.0, 0.0, -20.0)), and the generated 3D

computer model may then be re-positioned in the coordinate system to move it in the negative y-axis direction by a predetermined amount equal to half of the expected height of the subject object. Thus, for example, if the y coordinate of the calibration pattern plane is 0.0, then the 3D computer model would be re-positioned in the negative y-axis direction by 1.0 units. This achieves the same result of ensuring that the viewing axis of the default camera intersects the approximate centre of the 3D computer model.

Alternatively, the 3D computer model of the subject object may be generated relative to a calibration pattern lying in a plane having a predetermined y coordinate of, say, 0.0 but with an off-set in the y coordinate of each polygon vertex in the 3D computer model equal to minus one half of the expected height of the subject object (for example -1.0 units). In this way, the 3D computer model is not generated and then subsequently re-positioned, but is generated in the desired position relative to the default viewing camera straight away by incorporating the off-set into the y coordinate of each polygon of the model when it is generated.

Third Embodiment

A third embodiment of the invention will now be described.

The components of the third embodiment and the processing operations performed by the components are the same as those in the first embodiment, with the exception of the processing performed at steps S4-14, S4-18 and S4-40. These differences will be explained in detail below.

In the third embodiment, at step S4-14, as well as generating data requesting information from the customer processing apparatus defining the type of printer 18 or display panel 19 and data defining the maximum width of the subject object 210, mat data generator 38 also generates data requesting the customer processing apparatus to send data defining the height of the subject object 210.

Accordingly, at step S4-18 in the third embodiment, the customer processing apparatus transmits a signal 7 to processing apparatus 6 defining the requested printer/display details, maximum width of the subject object 210 and also the height of the subject object 210.